

1 I claim:

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3 1. A multihull craft comprising a principal hull of
4 displacement type and a lateral hull of semi-planning type.

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6 2. The craft of claim 1 in which said lateral hull is of the
7 semi displacement type.

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9 3. The craft of claim 1 in which said lateral hull is of the
10 transonic hull type.

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12 4. The craft of claim 1 in which all hulls are of the
13 transonic hull type.

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15 5. The craft of claim 1 in which lateral wing support
16 extends between said lateral hull and said principal hull.

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18 6. A multihull configuration comprising a principal hull, a
19 lateral hull, and a supporting structure therebetween, with
20 hydrodynamic impellers mounted on said supporting structure to
21 capture the rearward flow between said principal and lateral hulls
22 and impel said rearward flow in a rearward direction at a higher
23 speed.

24
25 7. A man powered craft having a principal body and a lateral
26 elongated body articulated on a side of said principal body, said
27 elongated body adapted to be moved between an upper level
28 disposition, and a lower level disposition in which the volume of

1 said lateral body can generate a lateral change of buoyant forces
2 when said principal body is heeled.

3
4 8. A slender man-powered craft having an aerodynamic
5 impeller driven by an electric motor powered by batteries for
6 selective use by said man.

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8 9. The craft of claim 8 having solar cells to recharge said
9 batteries.

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11 10. The craft of claim 9 in which said craft has a wing of
12 large chord and large area supporting a lateral hull with said area
13 providing substantial additional area for increased number of solar
14 cells.

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16 11. A multihull having a principal displacement type hull and
17 a lateral hull of transonic hull shape, with the speed / length
18 ratios of outer hull being larger than that of principal hull by a
19 factor greater than approximately 1.5.

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21 12. The multihull of claim 11 in which said multihull is of
22 a man-powered type.

23
24 13. A multihull having a principal hull and a lateral hull
25 connected to said principal hull by an approximately horizontal
26 structure when operating in the water, said structure being
27 articulated at its root at an approximately longitudinal
28 articulation which permits change of inclination of said structure

1 in front view.

2
3 14. A multihull having a principal hull, and a lateral hull
4 with each of said hulls having similar triangular waterplane
5 planform shapes with narrow end forward and broad end rearwards,
6 and with each said multihulls having, at any given speed, a
7 speed/length ratio of said outer hull no less than approximately
8 1.5 times that of the principal hull.

9
10 15. A vessel having a body with a bow, a stern, a
11 longitudinal length, and a waterplane in hydrostatic condition,
12 said water plane having a substantially triangular shape with a
13 pointed end adjacent said bow and a broad end adjacent said stern,
14 said vessel further characterized in that the waterplane of said
15 broad end has outboard ends and a center region, with said center
16 region being upstream of said outboard ends, forming in planform a
17 shallow Vee therebetween.